Abstract of the Disclosure

A method, and a system for carrying out that method, for deterministically matching first elements of a first set of objects or events with second elements of a second set of objects or events. Matching first and second elements are associated with common values of an identification code pn having |pn| characters, and where the identification code can be insufficient to uniquely identify the first elements, and portions of the identification code values associated with the first and second elements can be unknown. The method includes the steps of: a) generating a mapping θ for the first set such that, for each element I_i of the first set $\theta(I_i)$ equals $<k_i, ppn_i>$, where pn_i is at least a portion of the identification code value associated with the element I_i and ppn_i is defined as the first k_i characters of pn_i, and k_i is selected to be the minimum number of characters required to uniquely identify I_i in the first set, whereby values for k_i greater than |pn| imply that the element I_i is not uniquely identified by the portion ppn_i; b) determining pn_j for an element e_j in the second set, where pn_j is at least a portion of the identification code value associated with the element e_j; and c) matching the element e_j and the element I_i only if the first k_i characters of pn_j equal ppn_i and not matching the element e_j and the element I_i if the element I_i is not uniquely identified in the first set by the portion pn_i. The system can be controlled in accordance with program code on a computer readable medium. In one embodiment of the invention the first elements are letters and the second elements are events which occur during processing of the letters. In another embodiment of the invention the method includes a step of performing an additional consistency test and matching said letter I_i and event e_j only if said consistency test confirms such match.